- (5) Designate a single POC for matters regarding this regulation.
- (b) The Assistant Secretary of the Army, Installation and Logistics (ASA (I&L)) will—
- (1) Serve as the Secretary of the Army's responsible official for environmental matters abroad.
- (2) Maintain liaison with the Assistant Secretary of Defense for Production and Logistics (ASD (P&L)) on matters concerning E.O. 12114, DOD Directive 6050.7, and this regulation.
- (3) Coordinate actions with other Secretariat offices as appropriate.
- (c) The Chief of Engineers will-
- (1) Serve as ARSTAF proponent for implementation of E.O. 12114, DOD Directive 6050.7, and this regulation.
- (2) Apply in planning and executing overseas construction activities where appropriate in light of applicable statutes and SOFAs.
- (d) Deputy Chief of Staff for Organizations and Plans (DCSOPS) will—
- (1) Serve as the focal point on the ARSTAF for integrating environmental considerations required by E.O. 12114 into Army plans and activities. Emphasis is on those reasonably expected to have widespread, long-term, and severe impacts on the global commons or the territories of foreign nations.
- (2) Consult with the Office of Foreign Military Rights Affairs of Assistant Secretary of Defense (International Security Affairs) (ASD (ISA)) on significant or sensitive actions affecting relations with another nation.
- (e) The Judge Advocate General (TJAG), in coordination with the Office of the General Counsel, will provide advice and assistance concerning the requirements of E.O. 12114 and DOD Directive 6050.7.
- (f) The Chief of Public Affairs (CPA) will provide advice and assistance on public affairs as necessary.

§651.46 Implementation guidance.

(a) Environmental documents prepared under the provisions of this chapter should use the format for such documents found in Appendixes G and H. Otherwise, use a format appropriate in light of the applicable statutes and SOFAs.

(b) Submit nominations for inclusions in the list of CX through DAMO-SSM to the Army Environmental Office.

APPENDIX A TO PART 651—LIST OF CATEGORICAL EXCLUSIONS (CX)

Section I: Categorical exclusions (CX)

- A-1. Normal personnel, fiscal, and administrative activities involving military and civilian personnel (recruiting, processing, paying, and records keeping).
- A-2. Law and order activities performed by military police and physical plant protection and security personnel, excluding formulation and/or enforcement of hunting and fishing policies or regulations that differ substantively from those in effect on surrounding non-Army lands.
- A-3. Recreation and welfare activities not involving off-road recreational vehicle management.
- A-4. Commissary and Post Exchange (PX) operations, except where hazardous material is stored or disposed.
- A-5. Routine repair and maintenance of buildings, roads, airfields, grounds, equipment, and other facilities, to include the layaway of facilities, except when requiring application or disposal of hazardous or contaminated materials.
- A-6. Routine procurement of goods and services, including rotine utility services.
- A-7. Construction that does not significantly alter land use, provided the operation of the project when completed would not of itself have a significant environmental impact; this includes grants to private lessees for similar construction. (REC required.)
- A-8. Simulated war games and other tactical and logistical exercises without troops. A-9. Training entirely of an administrative or classroom nature.
- A-10. Storage of materials, other than ammunition, explosives, pyrotechnics, nuclear, and other hazardous or toxic materials.
- A-11. Operations conducted by established laboratories within enclosed facilities where—
- a. All airborne emissions, waterborne effluents, external radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing Federal, State, local laws, and regulations.
- b. No animals that must be captured from the wild are used as research subjects, excluding reintroduction projects. (REC required.)
- A-12. Developmental and operational testing on a military installation, where the tests are conducted in conjunction with normal military training or maintenance activities so that the tests produce only incremental impacts, if any and provided that the training and maintenance activities have

Pt. 651, App. A

been adequately assessed, where required, in other Army environmental documents. (REC required.)

A-13. Routine movement of personnel; routine handling and distribution of nonhazardous and hazardous materials in conformance with DA, EPA, Department of Transportation, and State regulations.

A-14. Reductions and realignments of civilian or military personnel that: (1) Fall below the thresholds for reportable actions as prescribed by statute; (2) will not result in the abandonment of facilities or disruption of environmental, surety (e.g., chemical, nuclear, or ammunition safeguards), or sanitation services (e.g., shutdown of a water treatment plant); and (3) will not otherwise require an EA or an EIS to implement (e.g., new construction to accommodate realigned personnel or major demolition activities). (REC required.)

A-15. Conversion of commercial activities (CA) to contract performance of services from in-house performance under the provisions of DOD Directive 4100.15.

A-16. Preparation of regulations, procedures, manuals, and other guidance documents that implement, without substantive change, the applicable HQDA or other federal agency regulations, procedures, manuals, and other guidance documents that have been environmentally evaluated.

A-17. Acquisition, installation, and operation of utility and communication systems, data processing, cable and similar electronic equipment that use existing rights of way, easements, distribution systems, and facilities.

A-18. Activities that identify or grant permits to identify, the state of the existing environment (for example, inspections, surveys, and investigations) without alteration of that environment or capture of wild animals

A-19. Deployment of military units on a temporary duty (TDY) basis where existing facilities are used and the activities to be performed have no significant impact on the environment. (REC required.)

A-20. Grants of easements for the use of existing rights-of-way for use by vehicles; electrical, telephone, and other transmission and communication lines; transmitter and relay facilities; water, wastewater, stormwater, and irrigation pipelines, pumping stations, and facilities; and for similar public utility and transportation uses. (REC required.)

A-21 Grants of leases, licenses, and permits to use existing Army controlled property for non-Army activities, provided there is an existing land-use plan that has been environmentally assessed and the activity will be consistent with that plan. (REC required.)

A-22. Grants of consent agreements to use a Government-owned easement in a manner consistent with existing Army use of the easement; disposal of excess easement areas to the underlying fee owner. (REC required.)

A-23. Grants of licenses for the operation of telephone, gas, water, electricity, community television antenna, and other distribution systems normally considered as public utilities. (REC required.)

A-24. Transfer of real property administrative control within the Army, to another military department, or other Federal agency, including the return of public domain lands to the Department of Interior and reporting of property available for outgranting; and grants of leases, licenses, permits, and easements for use of excess or surplus property without significant changes in land use. (REC required.)

A-25. Disposal of uncontaminated buildings and other improvements for removal off-site. (REC required.)

A-26. Studies that involve no commitment of resources other than manpower. (REC required.)

A-27. Study and test activities within the procurement program for Military Adaptation of Commercial Items for items manufactured in the U.S. (REC required.)

A-28. Development of table organization and equipment documents, no fixed location or site.

A-29. Grants of leases, licenses, and permits to use DA property for or by another governmental entity when such permission is predicated upon compliance with the NEPA. (REC required.)

Section II: Screening Criteria

A-30. A CX is a category of actions that do not individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an EA nor an EIS is required.

A-31. A CX may be used only when the criteria of paragraphs 4-1 and 4-2 have been applied and each of the following are true:

- (a) This action is not a major federal action significantly affecting the quality of the human environment.
- (b) There are minimal or no individual or cumulative effects on the environment as a result of this action.
- (c) There is no environmentally controversial change to existing environmental conditions.
- (d) There are no extraordinary conditions associated with this project.
- (e) This project does not involve the use of unproven technology.
- (f) This project involves no greater scope or size than is normal for this category of action
- (g) There is no potential of an already poor environment being further degraded.
- (h) This action does not degrade an environment that remains close to its natural condition.

Pt. 651, App. D

Department of the Army, DoD

- (i) There are no threatened or endangered species (or critical habitat), significant archaeological resources, National Registered or National Register eligible historical sites, or other statutorily protected resources.
- (j) This action will not adversely affect prime or unique agricultural lands, wetlands, coastal zones, wilderness areas, aquifers floodplains, wild and scenic rivers, or other areas of critical environmental concern.

[53 FR 46324, Nov. 16, 1988, as amended at 55 FR 35905, Sept. 4, 1990]

APPENDIX B TO PART 651—REFERENCES

Section I

Required Publications

AR 360-5 Army Public Affairs, Public Information.

Section II

RELATED PUBLICATIONS

A related publication is merely a source of additional information. The user does not have to read it to understand the regulations.

AR 5-10 Reduction and Realignment Actions.

AR 11–27 Army Energy Program.

 $AR\ 95\text{--}50$ $\,$ Airspace and Special Military Operation Requirements.

AR 140-475 Real Estate Selection and Acquisition: Procedures and Criteria.

AR 200-1 Environmental Protection and Enhancement.

AR 210-10 Administration.

AR 210-20 Master Planning for Army Installations.

AR 335–15 Management Information Control System.

AR 380-5 Department of the Army Information Security Program.

AR 385-10 Army Safety Program.

AR 420-40 Historic Preservation.

AR 530-1 Operations Security (OPSEC).

DODD 4100.15 Commercial Activities Programs.

DODD 6050.1 Environmental Effects in the United States of Department of Defense Actions.

DODD 6050.7 Environmental Effects Abroad of Major Department of Defense Actions.

Section III

RELATED FORM

DD Form 1391 Military Construction Project Data.

APPENDIX C TO PART 651—NATIONAL ENVIRONMENTAL POLICY ACT

(42 U.S.C. 4321 et seq.)

APPENDIX D TO PART 651—CONTENTS OF THE ENVIRONMENTAL IMPACT STATE-MENT (EIS)

D-1. Cover Sheet

The cover sheet will not exceed one page $(40~\mathrm{CFR}~1502.11)$ and will include—

- (a) A cover sheet preceded by a protective cover sheet that contains the following statement: "The material contained in the attached (final or draft) Environmental Impact Statement is for internal coordination use only and may not be released to non-Department of Defense Agencies or individuals until coordination has been completed and the material has been cleared for public release by appropriate authority." This sheet will be removed prior to filing the document with EPA.
- (b) A list of responsible agencies including the lead agency and any cooperating agency.
- (c) The title of the proposed action that is the subject of the statement and, if appropriate, the titles of related cooperating agency actions, together with State and county (or other jurisdiction as applicable) where the action is located.
- (d) The name, address, and telephone number of the person at the agency who can supply further information, and, as appropriate, the name and title of the major approval authority in the command channel through HQDA staff proponent.
- (e) A designation of the statement as a draft, final, or draft or final supplement.
- (f) A one-paragraph abstract of the statement that should describe only the need for the proposed action, alternative actions, and the significant environmental consequences of the proposed action and alternatives.
- (g) The date by which comments must be received, computed in cooperation with the EPA. (See example cover sheet, Figure D-1.)

LEAD AGENCY: Department of the Army, TRADOC.

COOPERATING AGENCY (IES): (if any) U.S. Forest Service, U.S. Department of Agriculture. TITLE OF THE PROPOSED ACTION: Development of training area, Fort Pleasant, Maryland

AFFECTED JURISDICTION: State of Maryland; Smith, Taylor, and Jones Counties.

PREPARER/PROPONENT APPROVED (OF REVIEWED BY): Name, address and telephone number, name and title of proponent. (i.e., Installation Commander or program manager).

REVIEWED BY: Name and title of the environmental coordinator

Pt. 651, App. D

APPROVED BY: Name and title of any intermediate proponent (i.e., MACOM commander); Name and title of Army Staff proponent (i.e., Director of program affected by EIS).

ABSTRACT: One paragraph summary.

REVIEW COMMENT DEADLINE: (Computed in cooperation with EPA guidance).

Figure D-1. Example cover sheet.

D-2. Summary

The summary will stress the major conclusions of environmental analysis, areas of controversy, and issues yet to be resolved. It should list all Federal permits, licenses, and other entitlements that must be obtained prior to proposal implementation. Further, a statement of compliance with the requirements of other Federal environmental protection laws will be included (40 CFR 1502.25).

In order to simplify consideration of complex relationships, every effort will be made to present the summary of alternatives and their impacts in a graphic format with the narrative. This summary should not exceed 10 pages.

D-3. Table of Contents

This section will provide for the table of contents, list of figures and tables, and a list of all referenced documents, including a bibliography of references within the body of the EIS. The table of contents should have enough detail so that searching for sections of text is not difficult.

D-4. The Purpose of and Need for the Action

This section should clearly state the nature of the problem and discuss how the proposed action or range of alternatives would solve the problem. This section is designed specifically to call attention to the benefits of the proposed action. If a cost-benefit analysis has been prepared for the proposed action, it may be included here, or attached as an appendix and referenced here. This section will briefly give the relevant background information on the proposed action and summarize its operational, social, economic, and environmental objectives.

D-5. Alternatives Considered

This section presents all reasonable alternatives and their environmental impacts. An examination of each specific proposal in clear terms is required. This section should be written in simple, nontechnical language for the lay reader. A no action alternative will be included (40 CFR 1502.14(d)). For actions other than construction, the term no action is often misleading because a continuation of the status quo is implicit. This section needs no examination of the status quo. A preferred alternative need not be identified in the DEIS; however, a preferred alternative generally must be included in the FEIS (40 CFR 1502.14(e)).

A simple title or a letter or numerical symbol may be used for each of the discussed alternatives (for example, alternative A). Reference to the title or designation will be continued uniformly throughout the document in the appropriate sections. The environmental impacts of the alternatives will be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among the options that are provided the decisionmaker and the public (40 CFR 1502.14). The information should be summarized in a brief, concise manner. The use of tabular or matrix format is encouraged to provide the reviewer with an ata-glance review. In sum, the following points are required:

- (a) A description of all reasonable alternatives including the preferred action, alternatives beyond DA jurisdiction (40 CFR 1502.14(c)), and the no action alternative.
- (b) A comparative presentation of the environmental consequences of all reasonable alternative actions including the preferred alternative.
- (c) A description of the mitigation measures nominated for incorporation into the proposed action and alternatives, as well as mitigation measures that are available but not incorporated.
- (d) Listing of any alternatives that were eliminated from detailed study. A brief discussion of the reasons for which each alternative was eliminated.

D-6. Affected Environment

This section will contain information about existing conditions in the affected areas necessary to understand the potential effects of the alternatives under consideration (40 CFR 1502.15). Environments created by the implemented proposal will be included as appropriate. Affected elements could include, for example, biophysical characteristics (ecology and water quality); land use and land use plans; architectural, historical, and cultural amenities; utilities and services; and transportation. This section will not be encyclopedic. It will be written clearly and the degree of detail for all points covered will be related to the significance and magnitude of expected impacts. Elements not impacted by any of the alternatives need only be presented in summary form or referenced.

D-7. Environmental and Socioeconomic Consequences

This section of the EIS forms the scientific and analytic basis for the summary comparison of effects discussed in D-5. The following will be discussed (40 CFR 1502.16):

- (a) Direct effects and their significance. Include in the discussion the direct impacts on human health and welfare and on other forms of life and related ecosystems. Examples of direct effect might include noise from military helicopter operations or the benefits derived from the installation of wet scrubbers to meet air quality control standards.
- (b) Indirect effects and their significance. Include here socioeconomic impacts. Many Federal actions attract people to previously unpopulated areas and indirectly induce polution, traffic congestion, and haphazard land development. Conversely, other actions may disperse the existing population. Aircraft noise often affects future development patterns, and air pollution abatement operations may result in secondary water pollution problems.
- (c) Possible conflicts between the proposed actions and Federal, regional, State, and local (including indian tribe) land and airspace use plans, policies, and controls for the area concerned. Compare the land use aspects of the proposed action and discuss possible conflicts, such as siting an extremely noisy activity adjacent to a residential area, leasing land for purposes inconsistent with State wildlife management, or creating conflicts with prime and unique farmland policies.
- (d) The environmental effects of alternatives, including the proposed action.
- (1) Impacts of the alternatives, including a worst case analysis where there are gaps in relevant information or scientific uncertainty.
- (2) Adverse environmental effects that cannot be avoided should the proposal be implemented. Include the relationship between short-term uses of the human environment and the maintenance and enhancement of long-term productivity. The section should discuss the extent to which the proposed action and its alternatives involve short-term vs. long-term environmental gains and losses. In this context, short-term and longterm do not refer to any rigid time period and should be viewed in terms of the environmentally significant consequences of the proposed action. Thus, short-term can range from a very short period of time during which an action takes place to the expected life of a facility.
- (e) Energy requirements and conservation potential of various alternatives and mitigation measures. Consult the Energy Resource Impact Statement (AR 11-27), when applicable, to satisfy this requirement. Account for

the energy consumption of each proposed alternative and associated economics. Discuss, where appropriate, the uses of renewable and nonrenewable energy resources. Conservation techniques that could attenuate energy consumption should also be discussed within this section; for example, the use of insulation for newly constructed family housing that would reduce the long-term consumption of fuel oil or natural gas.

- (f) Natural or depletable resource requirements and conservation potential of various mitigation measures. Include discussion of any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. The term resources should include—
- (1) Materials. Discuss materials in short supply such as metals and wood, but do not include materials that are plentiful or have competitive alternatives (for example, aggregate or fill materials).
- (2) Natural. Discuss the use of natural resources resulting in irrevocable effects such as ecosystem imbalance, destruction of wild-life, loss of prime and unique farmlands. Specifically include consumption of natural energy resources in short supply, such as oil or natural gas.
- (3) Cultural. Discuss destruction of human interest sites, archaeological and historical, scenic views or vistas, or valued open space. Reiterate lasting socioeconomic effects the proposed action might have on the surrounding community.
- (g) Urban quality, historic and cultural resources, and the design of the built environment, including reuse and conservation potential of various alternatives and mitigation measures. Discuss the effect on adjacent neighborhoods and the city at large. Examine the effects on physical design features (also known as the built environment) and resultant impacts on social interaction areas such as privacy, public opinion, personnel perceptions, and other aspects of the social environment. Review the reuse potential of existing building space and its time-use allocation, usually referred to as time and spatial management. (Time and spatial management allows for conservation of energy and other resources by discouraging new construction and operation until all existing building and time allocations have been fully scrutinized for alternate reuse.)
- (h) Means to mitigate adverse environmental effects. Include mitigation not already included as part of the various alternatives. Also, specify migitations that require action by other agencies or outside parties.

D-8. List of Preparers

The EIS will list the names of its preparers, together with their qualifications

Pt. 651, App. E

(expertise, experience, and professional disciplines.) (40 CFR 1502.17). Include those people who were primarily responsible for preparing (research, data collection, and writing) the EIS or significant background or support papers, and basic components of the statement. When possible, the people who are responsible for a particular analysis, as well as an analysis of background papers, will be identified. If some or all of the preparers are contractors' employees, they may be identified as such. Identification of the firm that prepared the EIS is not, by itself, adequate to meet the requirements of this point. Normally, the list will not exceed two pages.

$D\!\!-\!\!9$. Distribution List

For the DEIS, a list will be prepared indicating from whom review and comment is requested. The list will include public agencies and private parties or organizations. The FEIS will normally only list those who have commented or shown an interest in the proposed action.

D–10. Index

The index will be an alphabetical list of topics in the EIS, especially of the types of effects induced by the various alternative actions. Reference may be made to either page number or paragraph number.

D-11. Appendices

If an agency prepares an appendix to an EIS, the appendix will—

- (a) Consist of material prepared in connection with an EIS (as distinct from material that is not so prepared and incorporated by reference)
- (b) Consist only of material that substantiates any analysis fundamental to an impact statement.
- (c) Be analytic and relevant to the decision to be made.
- (d) Be circulated with the EIS or readily available upon request.

APPENDIX E TO PART 651—COUNCIL ON ENVIRONMENTAL QUALITY (CEQ) REGULATIONS FOR IMPLEMENTING THE PROCEDURAL PROVISIONS OF THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

(40 CFR parts 1500-1508)

APPENDIX F TO PART 651—IMPLE-MENTING A MONITORING AND METH-ODOLOGY PROGRAM ¹

F-1. Mitigation

- (a) The 1978 CEQ regulations for implementing NEPA recognizes the following five means of mitigating an environmental impact:
- (1) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (3) Rectifying the impact by repairing, rehabilitating, or restoring the effect on the environment.
- (4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (5) Compensating for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20).
- (b) The intention of mitigation is to reduce the effects of the action on the environment. The five means of mitigation (see (a), above) are discussed in (1) through (5) below.
- (1) Avoidance. This method avoids environmental impact by not performing certain activities; for example, allowing tracked vehicles to cross only at designated improved stream crossings. This restriction would reduce the effects on a stream resulting from random access, such as increased turbidity caused by bank erosion and bottom disturbance caused by the tracks.
- (2) Limitation of action. The extent of an impact can be reduced by limiting the degree or magnitude of the action; for example, changing the firing time or the number of rounds fired on artillery ranges to reduce the noise impact on nearby residents. In the example in (a) above, the number of authorized stream crossings would have been limited or minimized.
- (3) Restoration of the environment. This method restores the environment to its previous condition or better. Movement of troops and vehicles across vegetated areas often destroys vegetation. This impact can be mitigated by either reseeding or replanting the areas with native plants after the exercise

¹From: John Fittipaldi, et al., Handbook for Environmental Impact Analysis and Planning, Technical Report N-130, U.S. Army Construction Engineering Research Laboratory (USA-CERL), October 1982, pp. 133-143.

- (4) Preservation and maintenance operations. This method designs the action so as to reduce adverse environmental effects. Examples include maintaining erosion control structures, using air pollution control devices, and encouraging car pools in order to reduce transporation effects such as air pollution, energy consumption, and traffic congestion.
- (5) Replacement. This method replaces the resource or environment that will be impacted by the action. Replacement can occur in-kind or otherwise; for example, replace deer habitat in the project area with deer habitat in another area; or, replace fisheries habitat with deer habitat. This replacement can occur either on the site of impact or at another location. This type of mitigation is often used in water resources projects. For example, if an action were destroying some of the installation's best deer habitat, a potential mitigation would be developing another section of the installation into deer habitat. This is an example of an in-kind replacement at a different site.

F-2. Identification of Mitigation Techniques

- (a) Introduction. Identifying and evaluating mitigation techniques involves using experts familiar with the predicted environmental impacts. A single mitigation measure will often alleviate several different impact.
- (b) Sources of information. Many potential sources of information exist concerning the mitigation of various environmental effects. The following sources of information are available on post: Other sources are as follows:
- (1) Within the DA, there are sources such as the Army Environmental Hygiene Agency (AEHA), the major Army command (MACOM) environmental office, the Army Environmental Office, U.S. Army Corps of Engineers (USACE) research laboratories (for example, U.S. Construction Engineering Research Laboratory [USA-CERL], U.S. Army Waterways Experiment Station, and U.S. Cold Regions Research Laboratory), USACE Huntsville Division, and the military assistance offices in certain districts.
- (2) State agencies are another potential source of information. The appropriate POC within these agencies may be obtained from the installation environmental office.
- (3) Another source is directories such as USA-CERL Technical Report N-40, 2 as discussed in Engineering Technical Note 79-6. 3
- ²R. Lacey, et al., Compendium of Administrators of Land Use and Related Programs, Technical Report N-40/ADA057226 (USA-CERL July 1978)
- ³Coordination with Federal and State Land Use Agencies, Engineer Technical Note

- (4) Another source on mitigation procedures is Ramifications/Mitigation statements from USA-CERL's Environmental Impact Computer System (EICS).⁴
- (5) Local interest groups may also be able to help identify potential mitigation measures
- (c) Example mitigation techniques. Several different mitigation techniques have been used on military installations for a number of years. The following examples illustrate the variety of possible measures:
- (1) There are maneuver restrictions in areas used extensively for tracked vehicle training. These restrictions are not designed to infringe on the military mission, but rather to reduce the amount of damage to the training area.
- (2) Aerial seeding has been done on some installations to reduce erosion problems.
- (3) Changing the time and/or frequency of operations has been used. This may involve changing the season of the year, the time of day, or even day of the week for various activities. This avoids noise impacts as well as aesthetic, transportation, and some ecological problems.
- (4) Reducing the effects of construction has involved using techniques that keep heavy equipment away from protected trees and quickly reseeding areas after construction.
- (d) Mitigation alternatives. Consideration of all practical mitigation alternatives are considered. The emphasis is not on what can be theoretically accomplished, but on what can be accomplished for each alternative.
- (1) Practical mitigations are those that the proponent can accomplish with the project's constraints such as manpower and money. Practical measures must be defined at the installation level; what may be practical on one post or at one time may not be practical on another. A number of items determine what is practical, including military mission, manpower restrictions, cost, institutional barriers, technical feasibility, and public acceptance. Practicality does not necessarily ensure resolution of conflicts among these items, rather it is the degree of conflict that determines practicality.
- (2) The previous examples involved some amount of conflict in all these areas. Although mission conflicts are inevitable, they are not insurmountable. Therefore, the proponent should be cautious about declaring all mitigations impracticable and should carefully consider any manpower requirements. This may be a greater restriction than military mission conflicts.

^{76-6 (}Department of the Army (DA), 8 February 1979).

⁴L. V. Urban, et al., Computer-aided Environmental Impact Analysis for Construction Activities; User Manual, Technical Report E-50/ADA008988 (USA-CERL, March 1975).

Pt. 651, App. F

(3) There is no standard rule of thumb applicable to mitigation activities. The key point concerning both the manpower and cost constraints is that unless money is actually budgeted and manpower assigned, the mitigation does not exist. This will require coordination by the proponent office early in the process to allow enough time to get the mitigation activities into the budget cycle. If the mitigation is not funded on schedule with the action, the action can be judicially stopped.

(4) Mitigations that do not fall directly within the definition of practical must still be considered, including those to be accomplished by other agencies. The proponent must coordinate with these agencies so that they can plan to obtain the necessary manpower and funds. Mitigations that were considered but rejected must be discussed, along with the reason for the rejection, within the EIS

F-3. Monitoring

Monitoring is an integral part of any mitigation system and a way to examine an environmental mitigation. The two basic types of monitoring are as follows:

(a) Enforcement monitoring. Enforcement monitoring ensures that mitigation is being performed as described in the environmental document and ensuring that mitigation requirements and penalty clauses are written into any contracts. It also includes ensuring that these provisions are enforced. Before mitigation can take place on-post, it must be budgeted, scheduled, and the necessary man-

power must be assigned. Any changes required in post regulations must be completed and enforced. The actual mitigation (for example, aerial seeding of a training area) must be performed. Enforcement monitoring involves the monitoring of all these activities

(b) Effectiveness monitoring. Effectiveness monitoring measures the success of the mitigation effort and/or the environmental effect. This must be a scientifically based quantitative investigation. Generally, qualitative measurements are not acceptable. However, it is not necessary to measure everything that may be affected by the action, only enough information to judge the method's effectiveness.

F-4. Establishing a Monitoring System

Establishment of a monitoring system must involve all appropriate offices that will be involved in its implementation. When evaluating several different potential monitoring systems, the ability to perform the monitoring is the most critical factor. This means that manpower-both on post and outside expertise-must be available. Sufficient funds must also be available for the monitoring process. Figures F-1 through F-3 illustrate the steps in establishing a monitoring system. Figure F-1 is designed to help select the type of monitoring system needed. Figure F-2 shows the responsibilities of the lead agency in establishing an enforcement monitoring program. Figure F-3 illustrates the steps necessary to establish an effectiveness monitoring program.

Pt. 651, App. F

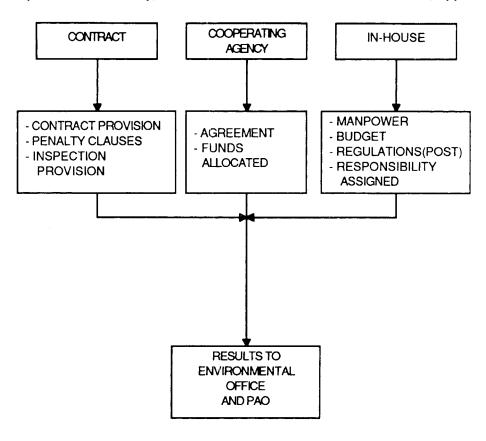


Figure F-1. Monitoring mitigations

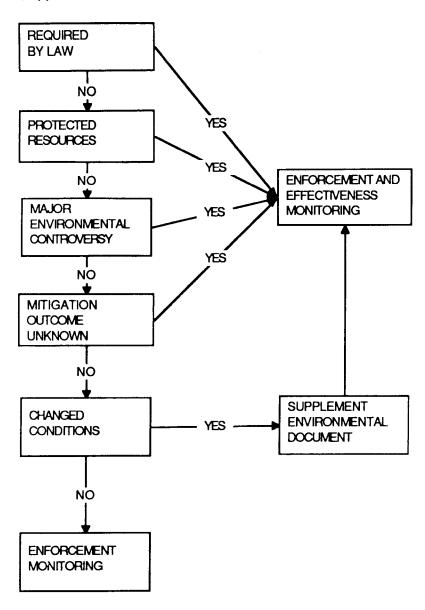


Figure F-2. Enforcement monitoring

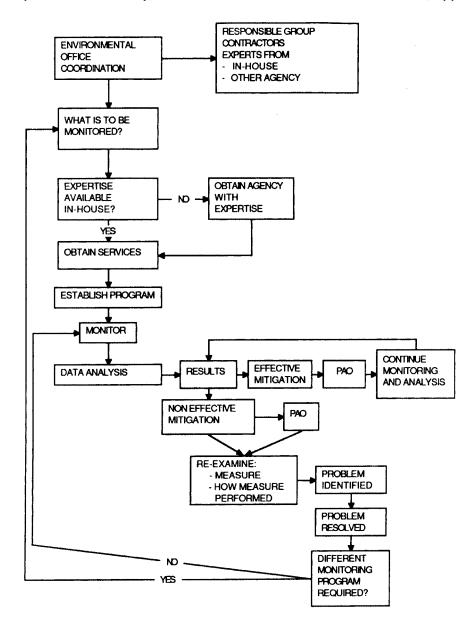


Figure F-3. Effectiveness monitoring

 $F\!-\!5$. Type of Monitoring Program

AR 200-1 and other laws and regulations help determine the types of monitoring pro-

gram. There are five basic considerations for monitoring programs (Figure F-1):

Pt. 651, App. F

- (a) Legal requirements. Permits for some actions will require that a monitoring system be established, for example, dredge and fill permits from the Corps of Engineers. These will generally require both enforcement and effectiveness monitoring programs.
- (b) Protected resources. These include Federal- or State-listed endangered or threatened species, important historic or archaeological sites (whether or not these are included on the National Register of Historic Places), wilderness areas, wild and scenic rivers, and other public or private protected resources. Private protected resources include areas such as Audubon Society Refuges. Nature Conservancy lands, or any other land that would be protected by law if it were under Government ownership, but is privately owned. If any of these resources are affected, an effectiveness and enforcement monitoring program must be undertaken in conjunction with the Federal, State, or local agency that manages the type of resource.
- (c) Major environmental controversy. If a controversy remains regrading the effect of an action or the effectiveness of a mitigation, an enforcement and effectiveness monitoring program must be undertaken. Controversy includes not only scientific disagreement about the mitigation's effectiveness, but also public interest or debate.
- (d) Mitigation outcome. The probability of the mitigation's success must be carefully considered. The proponent must know if the mitigation has been successful elsewhere. The validity of the outcome should be confirmed by expert opinion. However, the proponent should note that a certain technique, such as artificial seeding with the natural vegetation, that may have worked successfully in one area, may not work in another.
- (e) Changed conditions. The final consideration is whether any condition, such as the environmental setting, have changed (for example, a change in local land use around the area, or a change in project activities, such as increased amount of acreage being used or an increased movement of troops). Such changes will require preparation of a supplemental impact evaluation and additional monitoring. If none of these conditions are met (that is, requirement by law, protected resources, no major controversy is involved, effectiveness of the mitigation is known, and the environmental or project conditions have not changed), then only an enforcement monitoring program is needed. Otherwise, both an enforcement and effectiveness monitoring program will be required.

F-6. Enforcement Monitoring Progam Development

The development of an enforcement monitoring program is governed by who will actually perform the mitigation (Figure F-2).

The following three different groups may actually perform the work: a contractor, a cooperating agency, or a lead agency (inhouse). However, the lead agency is ultimately responsible for performing any mitigation activities.

- (a) Contract performance. Several provisions must be made in work to be performed by contract. The lead agency must ensure that contract provisions include the performance of the mitigation activity and that penalty clauses are written into the contracts. It must provide for timely inspection of the mitigation measures and is responsible for enforcing all contract provisions.
- (b) Cooperating agency performance. The lead agency must ensure that if a cooperating agency performs the work, it understands its role in the mitigation. The lead agency must determine and agree upon how the mitigation measures will be funded. It must also ensure that any necessary formal paperwork such as cooperating agreements are complete.
- (c) Lead agency performance. If the lead agency performs the mitigation, the proponent has several responsibilities to—
- (1) Ensure that needed tasks are performed.
- (2) Provide appropriate funding in the project budget.
- (3) Make arrangements for necessary manpower allocations.
- (4) Make any necessary changes in the agency (installation) regulations (such as, environmental or range regulations).
- (d) Results. In any case, whether the mitigation is performed by contract, a cooperating agency, or the lead agency, all results will be sent to the Public Affairs Office and the Environmental Office on post.

F-7. Effectiveness Monitoring Program Development

Effectiveness monitoring is the most difficult to establish (Figure F-3). The responsible agent, such as the Director of Training, should coordinate the monitoring with the Environmental Office.

- (a) Determination of what is to be monitored. The first step in this type of monitoring program is to determine what must be monitored. This determination should be based on criteria discussed during the establishment of the system; for example, the legal requirements, protected resources, area of controversy, known effectiveness, or changed conditions. Initially, this can be a very broad statement, such as reduction of impacts on a particular stream by a combination of replanting, erosion control devices, and range regulations.
- (b) Finding expertise. The next step is finding the expertise necessary to establish the monitoring system. The expertise may be available on-post; Table F-1 lists potential sources on a military installation. If it is not

available, it must be obtained from an outside source. Directories such as USA-CERL Technical Report N-40 5 may provide the needed information. In addition, local universities may have specialists and local interest groups who can identify experts within a particular field. This may be particularly helpful if a mitigation is considered controversial.

- (c) Establishment of a program. After a source of expertise is located, the program can be established, using the following five technical criteria:
- (1) Any parameters used must be measurable; for example, the monitor must be quantitative and statistically sound.
- (2) A baseline study must be completed before the monitoring begins in order to identify the actual state of the system prior to any disturbance.
- (3) The monitoring system must have a control, so that it can isolate the effects of the mitigation procedures from effects originating outside the action.
- (4) The system's parameters and means of measuring them must be replicable.
- (5) Parameter results must be available in a timely manner so that the decisionmaker can take any necessary corrective action before the effects are irreversible.

Table F-1. Potential Monitoring and Mitigation Expertise

Ecologu

Installation Environment Specialist Installation Wildlife Officer

Installation Forester

Installation Natural Resource Committee

Corps District Environmental Staff Health and Safety

Installation Preventive Medicine Officer

Installation Safety Officer

Installation Hospital

Installation Mental Hygiene or Psychiatry Officer

Chaplain's Office

 $Air\ Quality$

Installation Environmental Specialist Installation Preventive Medicine Officer Water Quality

Installation Environmental Specialist Installation Preventive Medicine Officer Corps District Environmental Staff

Socioeconomic

Personnel Office

Public Information Officer

Corps District Economic Planning Staff Earth Science

Installation Environmental Specialist Corps District Geotechnical Staff TABLE F-1. POTENTIAL MONITORING AND MITIGATION EXPERTISE—Continued

Land Use Impacts

Installation Master Planner Corps District Community Planners

Noise
Preventive Medicine Officer

Directorate of Engineering and Housing Installation Master Planner

Aesthetics

Installation Landscape Architect Corps District Landscape Architects Energy and Resource Conservation

Installation Environmental Specialist Historic and Archaeological Resources

Installation Environmental Specialist Installation Historian or Architect Corps District Archaeologist

Airspace

Installation Air Traffic and Airspace Officers

Department of the Army Regional Representative to the Federal Aviation Administration

Department of the Army Aeronautical Services Office

Military Airspace Management System (MAMS)

Installation Range Control Officer

- (d) Program management. There are several program management considerations. First, not every mitigation has to be monitored separately. The effectiveness of several mitigation actions can be determined by one measurable parameter. For example, the turbidity measurement from a stream can include the combined effectiveness of mitigation actions such as reseeding, maneuver restrictions, and erosion control devices. However, if a method combines several parameters and a critical change is noted, each mitigation measurement must be examined to determine the problem.
- (e) Initiation of program. The next step is to initiate the monitoring program. In most cases, a monitor should be established well before the action begins, particularly when biological variables are being measured and investigated. At this stage, any necessary contracts, funding, and manpower assignments must be initiated.
- (f) Sample collection, data analysis, and coordination. The next step in the monitoring program is sample collection and data analysis. A nontechnical summary of the data analysis should be provided to the Public Affairs Office, which will handle routine information requests related to the program. Technical results from the analysis should be sent to the installation environmental office, which will coordinate them with the proponent. Other related coordination with the concerned public and other agencies, as arranged through development of the mitigation plan, will be handled through the environmental office.

⁵R. Lacey, et al., Compendium of Administrators of Land Use and Related Programs, Technical Report N-40/ADA057226 (USACERL, 1978).

Pt. 651, App. G

(g) Continuation of program.

(1) If the mitigations are effective, the monitoring should be continued. However, even if a noneffective result is obtained, a nontechnical summary should still be sent to the Public Affairs Office. The Environmental Office and the responsible group should reexamine the mitigation measures with the experts. The problem may be either inadequacy of the mitigation measure, in the performance, or in the monitoring.

(2) Once the problem is identified, the responsible group and the experts should determine whether more detailed information is needed, whether the monitoring is being implemented incorrectly, or whether the mitigation is inadequate.

(3) After the problem is resolved, the group must determine whether a different monitoring system should be established. If the old program is adequate, it should be continued; however, if a different program is required, then a new system must be established.

APPENDIX G TO PART 651—REQUIRE-MENTS FOR ENVIRONMENTAL CONSID-ERATIONS—GLOBAL COMMONS

(Refer to Department of Defense, Final Procedures, 32 CFR part 197, Enclosure 1.)

APPENDIX H TO PART 651—REQUIRE-MENTS FOR ENVIRONMENTAL CONSID-ERATIONS—FOREIGN NATIONS AND PROTECTED GLOBAL RESOURCES

(Refer to Department of Defense, Final Procedures issued April 12, 1979 (44 FR 21786), 32 CFR part 197, Enclosure 2. Adopted herewith except that references to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) are changed to Assistant Secretary of Defense (Production and Logistics).)

APPENDIX I TO PART 651—GLOSSARY

$Section\ I$

Abbreviations

ARNG Army National Guard
ARSTAF Army Staff
ASA (I&L) Assistant Secretary of the Army
(Installations and Logistics)
CEQ Council on Environmental Quality
CERCLA Comprehensive Environmental
Response Compensation and Liability Act
CX Categorical exclusions
DA Department of the Army

DEIS Draft Environmental Impact Statement DESOH Deputy of Environment, Safety,

DESOH Deputy of Environment, Safety and Occupational Health

DOD Department of Defense

EA Environmental assessment

EIS Environmental Impact Statement

EPA Environmental Protection Agency FEIS Final Environmental Impact Statement

FNSI Finding of No Significant Impact FR Federal Register

FS Feasibility study

HQDA Headquarters, Department of Army

I&L Installation and logistics MACOM Major Army command

NEPA National Environmental Policy Act

NOA Notice of availability

NOI Notice of Intent

OASA (I&L) Office of the Assistant Secretary of the Army, (Installation and Logistics)

OCLL Office of the Chief of Legislative Liaison

OCPA Office of the Chief of Public Affairs OSD Office of the Secretary of Defense

POC Point of contact

REC Record of environmental consideration

ROD Record of decision

SARA Superfund Amendments and Reauthorization Act

SOFA Status of Forces Agreement

Section II

TERMS

Categorical exclusion (CX)

A category of actions that do not require an EA or an EIS because DA has determined that the actions do not have an individual or cumulative impact on the environment. (Refer to Subpart D for further discussion.)

Closure of a majority installation

(Except where the only significant impacts are socioeconomic with no significant biophysical environmental impact). "Majority military installation" is defined in chapter 2 of "Department of Defense Base Structure Report" as "A contiguous parcel of land with facilities and improvements thereon having a command and control organization providing a full range of BASOPS (base operations) functions in support of assigned missions." Compare with the definition of a "minor installation," which is "under the command of and receives resources support from the commander of another installation which is geographically distant."

Foreign government

A government regardless of recognition by the United States, political factions, and organizations that exercises governmental power outside the United States.

Foreign nations

Any geographic area (land, water, and airspace) that is under the jurisdiction of one or more foreign governments. It also refers to any area under military occupation by the United States alone or jointly with any other foreign government. Includes any area that is the responsibility of an international organization of governments also includes

contiguous zones and fisheries zones of foreign nations.

Global commons

Geographical areas outside the jurisdiction of any nation. They include the oceans outside territorial limits and Antarctica. They do not include contiguous zones and fisheries zones of foreign nations.

HQDA proponent

As the principal planner, implementer, and decision authority for a proposed action, the HQDA proponent is responsible for the substantive review of the environmental documentation and its thorough consideration in the decisionmaking process.

Major Federal action

Reinforces, but does not have a meaning independent of, "significantly affecting the environment," and will be interpreted in that context. A Federal proposal with "significant effects" requires an environmental impact statement, whether it is "major" or not. Conversely, a "major federal action" without "significant effects" does not necessarily require an EIS.

Preparers

Personnel from a variety of disciplines who write environmental documentation in clear and analytical prose. They are primarily responsible for the accuracy of the document. Proponent

Proponent identification is dependent on the nature and scope of a proposed action as follows:

(1) Any Army structure may be a proponent. For instance, the installation/activity Facility Engineer (FE)/Director of Engineering and Housing becomes the proponent of installation-wide Military Construction Army (MCA) and Operations and Maintenance (O&M) Activity; Commanding General, U.S. Army Training and Doctrine Command (TRADOC) becomes the proponent of a change in initial entry training. The proponent may or may not be the preparer.

(2) In general, the proponent is the lowest level decisionmaker. It is the unit, element, or organization that is responsible for initiating and/or carrying out the proposed action. The proponent has the responsibility to prepare and/or secure funding for preparation of the environmental documentation.

Significantly affecting the environment

An action, program or project that would violate existing pollution standards; cause water, air, noise, soil or underground pollution; impair visibility for substantial periods of any day; cause interference with the reasonable peaceful enjoyment of property or use of property; create an interference with visual or auditory amenities; limit multiple use management programs for an area; cause danger to the health, safety, or welfare of human life; or cause irreparable harm to animal or plant life in an area. Significant beneficial effects also do occur and must be addressed if applicable. (See 40 CFR 1508.27.)

PARTS 652-654 [RESERVED]

PART 655—RADIATION SOURCES ON ARMY LAND

AUTHORITY: 10 U.S.C. 3012.

§ 655.10 Use of radiation sources by non-Army entities on Army land (AR 385-11).

- (a) Army radiation permits are required for use, storage, or possession of radiation sources by non-Army agencies (including civilian contractors) on an Army installation. Approval of the installation commander is required to obtain an Army radiation permit. For the purposes of this section, a radiation source is:
- (1) Radioactive material used, stored, or possessed under the authority of a specific license issued by the Nuclear Regulatory Commission (NRC) or an Agreement State (10 CFR);
- (2) More than 0.1 microcurie (uCi) 3.7 kilobecquerels (kBq) of radium, except for electron tubes;
- (3) More than 1 uCi (37 kBq) of any naturally occurring or accelerator produced radioactive material (NARM) other than radium, except for electron tubes;
- (4) An electron tube containing more than 10 uCi (370 kBq) of any naturally occurring or accelerator produced NARM radioisotope; or
- (5) A machine-produced ionizing-radiation source capable of producing an area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 0.1 rem (1 mSv) in 1 hour at 30 centimeters from the radiation source or from any surface that the radiation penetrates.
- (b) The non-Army applicant will apply by letter with supporting documentation (paragraph c of this section) through the appropriate tenant commander to the installation commander. Submit the letter so that the installation commander receives the application at least 30 calendar days before the requested start date of the permit.
- (c) The Army radiation permit application will specify start and stop dates for the Army radiation permit and describe for what purposes the applicant